Unleashing the power of innovative aerospace technology....

Fe@tures

Air Force Research Laboratory AFRL

news@*afrl*

Spring 2000 **Official voice of the Air Force Research Laboratory**

Directorate hosts National Space and Missile Materials Symposium in San Diego

by Fred Coleman, Materials and Manufacturing Directorate

WRIGHT-PATTERSON AFB, OHIO — People from defense, industry and academia all gathered in San Diego recently for the National Space and Missile Materials Symposium (NSMMS), which was hosted by the Air Force Research Laboratory Materials and Manufacturing Directorate.

This year's symposium was held Feb. 27 through March 2, at the Town and Country Resort and Convention Center. The event is considered the prime symposium for discussing state-of-the-art issues in materials and processes for space and missiles.

This year's theme, "Materials, Processes, and Applications: Challenges of Space," focused on the technical challenges facing the nation's leadership in materials and processes research applied to space and missile systems. With this theme, the NSMMS provided a thorough review of the hot topics in materials and processes challenging the movement to space. The Symposium featured tutorials; a plenary session; technical sessions on materials challenges for accessing space, operating in space, and missile defense; poster papers; and exhibits.

Members of the directorate were among the presenters at the symposium who discussed materials and advanced technologies that impact the future direction of science and technology. One tutorial looked at next generation propulsion for accessing and operating in space. Other presentations provided an overview of microelectromechanic structures technology and its applications to aerospace systems, the unique environments faced by materials in space and launch vehicles, and innovation approaches to the affordable processing and fabrication of a wide range of advanced materials.

Additionally, a poster paper session was held. This event featured 22 papers on materials and processes issues for space and missile systems. During the week, the symposium also featured over 30 industry and government exhibits covering the range of cutting edge materials technologies.

A working group session was held for members of the Symposium Steering committee to discuss lessons learned and to define products that the symposium event and steering committee will produce.

The symposium, which originated in 1996 as a Materials and Manufacturing Directorate program review,was hosted by the directorate. This year's event was sponsored by the Air Force, Army, Navy, National Aeronautics and Space Administration, National Reconnaissance Organization, Defense Advanced Research Projects Agency, Oak Ridge National Laboratory, Ballistic Missile Defense Organization, and Aerospace Corporation.

The next NSMMS will be held in June 2001 in Monterey, Calif. For more information, visit their website at *www.usasymposium.com* or contact Michael Stropke at AFRL/ML, (937) 656-6482. **@**